

CLAIMS

1. A breath actuated medicament dispensing device comprising:
an aerosol container containing a pressurised medicament formulation equipped
5 with a metered dose dispensing valve having a movable valve stem;
a housing disposed about the aerosol container;
a patient port in communication with the dispensing valve;
priming means adapted to apply a bias to the valve stem relative to the aerosol
container sufficient to move the valve stem to fire the valve;
10 restraining means movable between a blocking position in which it prevents said
bias firing the valve and a release position in which it allows said bias to fire the valve;
trigger means responsive to inhalation through the patient port to cause the
restraining means to move from its blocking position to its release position;

15 wherein the aerosol valve comprises:
a valve housing;
a tank component positioned within the valve housing; and
a valve stem mounted within said valve housing and tank component sequentially
movable between a first position, a second position and a third position as the valve stem
20 is depressed in a single direction;
such that:
as the valve stem is moved from said first position towards said second position a
metering chamber is formed and defined between the valve stem and tank component and
formulation flows from the aerosol container into the metering chamber;
25 in said second position the metering chamber has a predetermined volume and is
sealed from the aerosol container; and
in said third position formulation is released from the metering chamber through
the valve stem;
and wherein:

30 the priming means is constructed and arranged such that as the device is primed by
operating said priming means the valve stem is moved from its first to its second position
to allow formation and filling of the metering chamber;

the restraining means is constructed and arranged such that in its blocking position it maintains the valve stem in its second position until the trigger means is actuated by inhalation through the patient port.

- 5 2. A breath actuated medicament dispensing device as claimed in Claim 1 in which the priming means comprises a spring.
3. A breath actuated medicament dispensing device as claimed in Claim 1 or Claim 2 in which the valve stem is located within a nozzle block and the priming means applies a
10 bias to the aerosol container.
4. A breath actuated medicament dispensing device as claimed in any preceding claim in which the restraining means comprises a latch and the triggering means comprises a vane.
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5. A breath actuated medicament dispensing device as claimed in Claim 4 in which the vane is positioned within the patient port.
6. A breath actuated medicament dispensing device as claimed in any one of Claims 1
20 to 3 in which the restraining means comprises means for applying a resisting pneumatic force to prevent firing of the valve under the influence of the priming means.
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